



**United States
Department of
Agriculture**

Office of the
Chief Information Officer

DN 3300-022

Governance of the Universal
Telecommunications Network (UTN)

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U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

DEPARTMENTAL NOTICE		NUMBER: 3300-022
SUBJECT: Governance of the Universal Telecommunications Network (UTN)	DATE: May 30, 2007	
	OPI: Office of the Chief Information Officer, Telecommunications Management Division	
CODIFICATION/EXPIRATION: This Notice will expire one year from the date it is signed, unless rescinded or canceled earlier.		

1 PURPOSE

This Departmental Notice (DN) establishes a Universal Telecommunications Network (UTN) governance process and sets up an UTN Technical Review Board (TRB), henceforth referred to as the “TRB” or the “Board”. The purpose of the TRB is to help define, establish and operate an end-to-end UTN configuration management process for significant technical changes, including steps to authorize and track those changes. Significant changes are defined as those that could result in costs to the implementation of the UTN contract beyond budgeted expenses, and/or those with the potential, if inappropriately configured and implemented, to adversely impact services to UTN customers.

In addition, this Notice defines the roles and responsibilities of the Telecommunications Advisory Sub Council (TASC). Significant changes to the UTN that are strategic in nature will need to be reviewed and approved by the TASC prior to implementation.

2 SPECIAL INSTRUCTIONS/CANCELLATION

This notice is effective XXX.

Departmental Regulation 3300-01 will be revised to reflect this new policy.

A new Departmental Manual 3300-XXX will be constructed to incorporate the Roles and Responsibilities presented in Section 9.

3 POLICY

USDA will establish formal processes to: manage changes to its enterprise wide network; plan for seamless engineering changes without disruption to the network; minimize unexpected changes and unanticipated interruptions; negotiate better contracts for shared services; and maintain an optimized and stable network. To effectively accomplish these objectives, USDA will create a system-level Technical Review Board (TRB) to assure the integrity of the UTN by evaluating proposed technical changes for engineering soundness, conformity to standards, adherence to cyber security policies and procedures, and adherence to USDA's Enterprise Architecture. The TRB serves as a system level configuration change control board to the USDA Enterprise Configuration Control Board (ECCB)¹ and is an element of USDA's overall governance process.

The TRB will consist of a core group of representatives from the Office of the Chief Information Officer (OCIO) Telecommunications Services and Operations (TSO), Cyber Security, the National Information Technology Center (NITC), and the National Finance Center, as well as a larger group of representatives from each USDA agency and staff office that utilizes UTN services. Meetings will be held regularly as determined by the Associate Chief Information Officer (ACIO) for Telecommunications or designated personnel, sufficient for timely approval of changes prior to implementation. Members shall establish and maintain a current charter that outlines the processes by which the TRB will conduct business. In addition USDA is formally establishing the Telecommunications Advisory Sub Council (TASC) to advise the ACIO for Telecommunications Services and Operations

¹ USDA Office of the Chief Information Officer. (November 2, 2004) *USDA Information and Technology Transformation*. Departmental Regulation. US Department of Agriculture, Washington, DC pp 5, 10, and 13.

(TSO) on the service and performance of the UTN, and to provide recommendations on architecture enhancements and service improvements. While the TASC was informally established by IT Leadership in 1994, this regulation recognizes the TASC as a formal advisory body that provides agencies with a forum where agency representatives can help shape USDA's telecommunications infrastructure roadmap.

4 BACKGROUND

Recently, USDA implemented the Universal Telecommunications Network (UTN) to more effectively and efficiently meet the growing telecommunications needs of USDA. The UTN offers a high-performance telecommunications backbone service that agencies and staff offices can use without investing in their own infrastructures. To ensure optimal use and controlled expansion of the UTN infrastructure, strong governance of the UTN is required. It is critical that service enhancements and technology changes occur in a manner that maintains strong network performance, reliability and security. Stakeholder input is also important to better understand agency requirements and to develop a strategic partnership with agencies to help agencies meet their mission requirements. Therefore, OCIO is working with the Department's agencies and staff offices to utilize the TASC to help define the strategic direction of the UTN, and to establish a Technical Review Board (TRB) that will provide a formal process for implementing and administering technical changes to the UTN.

The OCIO's Telecommunications Enterprise Architect (TEA) will chair the TRB. All change requests will be directed to the Telecommunications Enterprise Architect Office (TEAO) through Telecommunications Services Operations, National Telecommunications Services and Operations (TSO/NTSO) for initial review. The ACIO for TSO in consultation with TEA will determine what changes are significant, and what changes will be forwarded to TASC or TRB for further consideration.

Together, TASC and TRB will provide the foundation for strong governance, effective stakeholder input mechanism, and optimal use of UTN resources.

5 APPLICABILITY AND SCOPE

This notice applies to all USDA agency and staff offices that utilize UTN services.

6 REFERENCES

"Clinger-Cohen Act of 1996", Division E, Information Technology Management Reform, Title L1, Responsibility for Acquisitions of Information Technology, Subtitle C – D.

“Federal Managers’ Financial Integrity Act” of 1982 (31 U.S.C.3512).

“The Office of Federal Procurement Policy Act”, (41 U.S.C. 401 et seq.) Division D, Federal Acquisition Reform Act Workforce Provisions, Section 37, Acquisition Workforce.

“The Paperwork Reduction Act of 1995”, U.S. Code, Title 44, Chapter 35, Section 3506, Federal Agency Responsibilities, (b), (3), (B).

USDA Information and Technology Transformation. Departmental Regulation. Office of the Chief Information Officer, US Department of Agriculture, Washington, D C. November 2, 2004. Sec 4e, Sec 8, Sec 10c

7 DEFINITIONS

- a **Telecommunications Advisory Sub Council (TASC):** The TASC serves as the primary USDA telecommunications advisory body to the Information Technology (IT) Leadership Council, which in turn provides counsel and advice to the USDA Chief Information Officer (CIO) in setting the Department’s strategic IT direction. The TASC is comprised of senior telecommunications officials from USDA agencies and staff offices. TASC members discuss issues of importance to multiple agencies and collaborate to achieve improvements in planning, developing, operating and maintaining enterprise-wide voice and data infrastructure in support of the USDA mission. This DN further defines the role of the TASC members as advisors to the ACIO for TSO regarding the service and performance of the UTN, including recommendations on architecture enhancement and service improvements.
- b **Departmental (Enterprise) Application:** An application is considered to be a “Departmental (Enterprise) Application” if its deployment will cause a change in the UTN security profile and/or a change in the amount of bandwidth needed on the UTN backbone, or if the applications is utilized department-wide or by more than one agency.
- c **Significant architectural and design changes** to the UTN include the following examples:
 - (1) Engineering and architectural changes that result in significant cost increases (i.e. exceeding \$25,000);
 - (2) Changes involving sufficiency and viability (e.g. bandwidth increases and decreases); and/or
 - (3) Establishment of new services (e.g. VoIP, international connections).
- d **Technical Review Board (TRB):** The purpose of the TRB is to establish and manage an end-to-end UTN change request process for significant technical and implementation changes. TRB members will define and administer the processes

necessary to ensure that agency IT projects do not adversely impact the enterprise backbone, potentially affecting other users. Processes will include steps to track approved changes. Functionally, the TRB can be viewed as the UTN Configuration Control Board (UTN CCB).

- e **Significant technical and implementation changes** to the network include the following examples:
 - (1) Deployment of a new agency application or system on the UTN;
 - (2) Re-deployment or movement of Web Farms; or
 - (3) Significant changes in firewall rules.
- f **Telecommunications Enterprise Architect:** An OCIO individual responsible for chairing the TRB.
- g **Universal Telecommunications Network:** The USDA enterprise-wide backbone network for the transmission of data between USDA agencies, staff offices, customers and stakeholders.
- h **USDA Enterprise Configuration Control Board (ECCB).** The ECCB advises and recommends to the USDA Chief Information Officer ways in which the Department manages its technology, data, and information through the development, maintenance, and oversight of the enterprise architecture. The ECCB works with existing and new system-level Configuration Control Boards.

NOTE: The Chief Information Officer provides day-to-day management and stewardship of the enterprise architecture on behalf of the E-Board, which owns the enterprise architecture and is responsible for protecting and supporting it.¹

8 ACRONYMS

ACIO	-	Associate Chief Information Officer
DN	-	Departmental Notice
EA	-	Enterprise Architecture
ECCB	-	Enterprise Change Control Board
NTSO	-	National Telecommunications Services and Operations
OCIO	-	Office of the Chief Information Officer
ROI	-	Return on Investment
TEA	-	Telecommunications Enterprise Architect
TEAO	-	Telecommunications Enterprise Architect Office

TRB	-	Technical Review Board
TSO	-	Telecommunications Services and Operations
UTN	-	Universal Telecommunications Network
VoIP	-	Voice Over Internet Protocol

9 ROLES AND RESPONSIBILITIES

a The USDA Associate Chief Information Officer (ACIO) for Telecommunications Services and Operations (TSO) will perform the following roles and responsibilities for the TASC:

- (1) Serve as the TASC Chairperson.
- (2) Provide resources to administer the TASC
- (3) Develop, implement and maintain telecommunications policies, processes, and procedures for UTN Governance.
- (4) Address telecommunications issues that cut across organizational lines or affect the whole department
- (5) Pursue telecommunications initiatives that impact UTN, such as new technology, new or revised standards, managerial innovations, or changes in legislation.
- (6) Encourage interaction with the other Advisory Sub Councils (Cyber Security and the Information Technology Management) to address interrelated issues, recommendations and initiatives.
- (7) Promote conferences and meetings to expand the understanding of UTN related activities throughout the Department.
- (8) Approve initiatives and proposals for significant changes to UTN as defined in Section 7 of this DN.

b The USDA Associate Chief Information Officer (ACIO) for TSO will perform the following roles and responsibilities for the TRB:

- (1) Establish the TRB, and ensure sufficient agency and staff office representation on the TRB.
- (2) Implement policies for establishing and operating the TRB.
- (3) Provide resources to administer the TRB and designate TSO representatives to serve on the TRB and participate in working group activities.
- (4) Oversee the implementation of UTN network decisions formally approved by TRB members.
- (5) Review and approve proposals for significant changes to the UTN submitted by members, and select new initiatives for discussion and Board approval at meetings.
- (6) In the event of an emergency that affects UTN service, ACIO retains the

authority to make an engineering change decision after appropriately considering the risks and consequences, and will inform the TRB afterward for concurrence or modification.

- c The Office of Cyber Security will perform the following roles and responsibilities as a member of the TRB:
 - (1) Designate Cyber Security representatives with expertise in telecommunications security to participate in working group activities.
 - (2) Collaborate with TRB members to develop Cyber Security policies, processes or procedures that advance infrastructure availability, integrity, authentication, confidentiality and no repudiation in conjunction with consensus decisions for significant change.

- d National Telecommunications Services and Operations will perform the following roles and responsibilities on the TASC:
 - (1) Serve as technical resource to the ACIO for TSO, the TASC vice-chair, and working groups.
 - (2) Participate in TASC meetings as needed by the ACIO for TSO.
 - (3) Review proposals of significant change and report technical and implementation findings to the ACIO for TSO.

- e National Telecommunications Services and Operations will support the TRB in the following way:
 - (1) Participate in TRB meetings.
 - (2) Implement TRB recommendations and inform the TRB in writing according to a format established by the TRB once the implementation is complete.
 - (3) Issue change notices when changes are made to stabilize or maintain the operational network at its current level. For example:
 - 1. Correct an outage.
 - 2. Apply security measures.
 - 3. Improve service or network performance.
 - (4) Report on comparisons between standard vs. actual performance.

- f Agency and staff office roles and responsibilities on the TASC will:

- (1) Participate in TASC meetings as necessary.
- (2) One agency representative shall serve as Vice-Chair of the TASC for a period of one year on a rotating basis. Each year a new Vice-Chair will be elected based on a consensus vote.
- (3) Propose new initiatives, solutions, and significant changes to UTN based on their mission requirements and program needs.
- (4) Participate in subgroups as required. The TASC will establish working groups as necessary in coordination with TRB members. Working groups will:
 - (a) Consist of a wide variety of subject matter experts with backgrounds suitable to conduct in-depth analyses on specific topics that may be complex in nature, such as:
 1. Market analyses (e.g. key vendors, trends)
 2. Technical analyses (e.g. standards, specifications, performance metrics)
 3. Feasibility studies (i.e. application specific)
 4. Cost benefit and cost trade off analyses (ROI and alternatives)
 5. Risk assessments (e.g. technical, resource availability)
 6. Pilot tests
 - (b) Make written recommendations to the TASC for significant changes to the UTN.

g Agency and staff office roles and responsibilities on the TRB will:

- (1) Assign a permanent member to serve as the agency or staff office representative to the TRB. Members of the TRB will:
 - (a) Represent those agencies or staff offices that fund UTN.
 - (b) Participate as permanent members representing the major agencies or mission areas, and rotating members from the staff offices and small agencies.
 - (c) Establish and maintain a current charter for the TRB in coordination with the Chair and Vice-Chair.
 - (d) Jointly make recommendations to improve the quality of the UTN, including short and midterm enhancements, as well as priorities for next generation technologies and services.
 - (e) Review new agency or Departmental applications for engineering sufficiency, security, conformance to enterprise architecture and anticipated performance over the Wide Area Backbone.
 - (f) Review and approve proposed engineering changes to UTN prior to

implementation in a timely manner. If the response is not timely, or an emergency change is required, the NTSO will proceed as necessary with the approval of the ACIO for TSO.

- (g) Respond to NTSO in a timely manner with recommendations, or allow NTSO to proceed as necessary with the approval of the ACIO for TSO.
 - (h) Where necessary, establish special project working groups suitably staffed to address the specifics of a service change request.
 - (i) Facilitate the implementation of approved change requests by establishing sub-groups from requesting agencies, NTSO, and Cyber-Security as needed.
 - (j) Keep TASC informed of recommendations on significant changes and provide periodic reports on recommendations and other relevant activities.
 - (k) Establish standards of performance for each step within the process in coordination with the TEAO.
 - (l) Follow the process established in coordination with the TEAO.
 - (m) Provide a basis for migration, consolidation and retirement of similar services across agencies in support of the USDA enterprise architecture.
 - (n) Periodically evaluate the effectiveness of the process.
- (2) Submit change requests to TEAO. The guide for preparing change requests can be found at http://www.ocionet.usda.gov/ocio/tso/utn/techreview_board_utn.html.
 - (3) Meet with the TRB, as required by the USDA CIO or the USDA ACIO for TSO.
 - (4) Review technical requirements and make recommendations to the TRB Chair.

h The Telecommunications Enterprise Architect (TEA) will:

- (1) Serve as the TRB chair.
- (1) Establish the TRB in close coordination with the ACIO for TSO.
- (2) Ensure that Telecommunications Services and Operations, Cyber Security, the National Information Technology Center are all represented, and determine whether there are sufficient numbers of agencies present for those decisions under consideration. The TEA will have the discretion to invite additional parties as deemed necessary to sufficiently represent the issues.
- (3) Provide ongoing administrative support for the TRB.
- (4) Develop and implement a process for the submission, review, approval and administering of changes to the UTN architecture.
- (5) Establish a methodology to track proposals for significant change and generate status reports.
- (6) Prepare and submit regular reports to the ACIO of TSO and the Director of NTSO on the progress of each proposal as well as working group activities;
- (7) Prepare status reports to the TASC via the ACIO for TSO.
- (8) Provide administrative support for Working Group meetings as required by the ACIO for TSO.

- (9) Establish and maintain a Web site for the TRB to provide a site to track activities and for information dissemination on membership, processes, meeting schedules, approved changes, evaluation findings and administrative items.
- (10) Provide a historical reference of all change requests.
- (11) Establish an end-to-end repeatable process to handle the change requests originating from USDA agencies and offices.

i The Telecommunications Management Division staff will:

- (1) Review IT waivers exceeding \$25,000 in coordination with the Telecommunications Enterprise Architect and NTSO.
- (2) Develop waiver recommendations for the approval/disapproval by the ACIO for TSO.

10 INQUIRIES

Direct all questions concerning this notice to the Telecommunication Management Division, Telecommunications Services and Operations, Office of the Chief Information Officer.